

09/998,912

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently amended) A vertebral endplate chisel comprising:
  - a) a base having upper and lower portions, and proximal and distal portions,
  - b) an upper shaving portion extending distally from the upper base portion,
  - c) a lower shaving portion extending distally from the lower base portion,the upper and lower shaving portions being disposed substantially parallel to each other and each having a width, and  
d) a guide integrally connected to and extending distally from the base and having a width, the guide located between the shaving portions and having a width wherein the width of the guide is no more than 95% of the width of the upper shaving portion,  
wherein the guide is a non-cutting centering device adapted to center the chisel within the disc space so that equal amounts of bone are removed from each endplate by the shaving portions as the chisel moves through the disc space.
2. (Original) The chisel of claim 1 further comprising c) a handle located proximal to the proximal portion of the base.
3. (Original) The chisel of claim 2 wherein the handle terminates in a substantially flat surface which provides an impact surface.
4. (Original) The chisel of claim 2 wherein the handle comprises a distal perimeter and a proximal perimeter, the distal perimeter being smaller than the proximal perimeter.
5. (Original) The chisel of claim 1 further comprising e) an extraction means located proximal to the base and shaped so as to connect to an extraction device.
6. (Original) The chisel of claim 1 wherein the distal portion of the base comprises upper, intermediate and lower portions, each having a width, wherein at least a distal portion of each of the upper, intermediate and lower portions has a substantially equal width, so that the distal end of the base comprises a substantially blocky portion.

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These claims  
are renumbered  
to preserve  
original numbering  
by the examiner  
3/27/2004  
P. Lewis  
7/30/2004

7. (Original) The chisel of claim 1 wherein the base is shaped so as to provide debris pathways.
8. (Previously Presented) The chisel of claim 1 wherein the base further comprises an intermediate portion having a width, and wherein the intermediate portion width is thinner than the upper and lower portion widths, thereby providing flutes for removal of the debris.
9. (Previously Presented) The chisel of claim 1 wherein the base further comprises an intermediate portion wherein the upper and lower portions of the base do not contact at least a portion of the intermediate portion, so that debris pathways are formed therebetween.
10. (Original) The chisel of claim 9 wherein the intermediate portion comprises lateral portions, and the upper and lower portions are integrally connected to the lateral intermediate portions.
- 11. (Previously Presented) The chisel of claim 1 wherein the base has an integral I-beam-like shape and further comprises an intermediate portion, wherein the upper base portion is integrally connected to the intermediate portion, and the lower base portion is integrally connected to the intermediate portion, wherein each of the intermediate, upper and lower base portions has a width, and wherein the width of each of the upper and lower base portions is greater than the width of the intermediate portion.
12. ~~AT.~~ (Previously Presented) The chisel of claim 11 wherein the I-beam-like shape is an I-beam shape.
13. ~~12.~~ (Previously Presented) The chisel of claim 11 wherein the I-beam-like shape is a bulging I-beam shape.
14. ~~13.~~ (Previously Presented) The chisel of claim 11 wherein the I-beam-like shape is a bow-tie shape.
15. ~~14.~~ (Original) The chisel of claim 1 wherein the upper shaving portion comprises an outer surface and an inner surface whose intersection forms a tip having an angle  $\alpha$  suitable for shaving endplates.
16. ~~15.~~ (Original) The chisel of claim 15 wherein the angle  $\alpha$  is between 20 and 40 degrees.

- 17 ~~16~~. (Original) The chisel of claim 15 wherein the lower shaving portion comprises an outer surface and an inner surface whose intersection forms a tip having the same angle  $\alpha$  as that of the upper shaving portion.
- 18 ~~17~~. (Previously Presented) The chisel of claim 8 wherein the intermediate portion of the base narrows at the distal end thereof to form at least one secondary orthogonal shaver.
- 19 ~~18~~. (Previously Presented) The chisel of claim 18 wherein the guide includes a neck extending distally from the intermediate portion of the base, and wherein the at least one secondary orthogonal shaver is located on either side of and proximal to the neck.
- 20 ~~19~~. (Original) The chisel of claim 1 wherein the guide comprises a neck portion extending distally from the base and a head portion extending from the neck, wherein the head comprises upper and lower lands.
- 21 ~~20~~. (Original) The chisel of claim 20 wherein at least a portion of each land extends further distally than the shaving portions.
- 22 ~~21~~. (Original) The chisel of claim 1 wherein the guide is substantially centered between the shaving portions.
- 23 ~~22~~. (Original) The chisel of claim 1 wherein the guide and the upper shaving portion each have a width, and the width of the guide is no more than 50% of the shaving portion width.
- 24 ~~23~~. (Original) The chisel of claim 1 wherein the guide width is no more than 25% of the shaving portion width.
- 25 ~~24~~. (Original) The chisel of claim 1 wherein the guide comprises a neck portion extending from the base and a head portion extending from the neck, and the head is sufficiently thin and centered so that the entire guide width is located within the middle one-third of the width of the shaving portions.
- 26 ~~25~~. (Original) The chisel of claim 25 wherein the guide is located within the middle one-fifth of the width of the shaving portions.
- 27 ~~26~~. (Previously Presented) The chisel of claim 11 wherein the guide includes a neck portion extending distally from the intermediate portion and a head portion extending distally from the neck.

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- 28 27. (Previously Presented) The chisel of claim 27 wherein the neck portion is rectangularly shaped.
- 29 28. (Previously Presented) The chisel of claim 27 wherein the neck portion widens at an angle  $\beta$  as it extends distally.
- 30 29. (Original) The chisel of claim 29 wherein the upper shaving portion comprises an outer surface and an inner surface whose intersection forms a tip having an angle  $\alpha$  suitable for shaving endplates, and wherein the angle  $\beta$  is substantially equal to the angle  $\alpha$ .
- 31 30. (Previously Presented) The chisel of claim 27 wherein the head portion has a tapered distal portion which narrows distally.
- 32 31. (Previously Presented) The chisel of claim 31 wherein the tapered distal portion of the head portion forms an angle  $\gamma$  of between 30 and 60 degrees.
- 33 32. (Previously Presented) The chisel of claim 27 wherein the head portion has an axial cross section having a bullet shape.
- 34 33. (Previously Presented) The chisel of claim 27 wherein the head portion has a nipple-like distal portion.
- 35 34. (Previously Presented) The chisel of claim 27 wherein the head portion has a radial cross-section having a circular shape.
- 36 35. (Previously Presented) The chisel of claim 27 wherein the head portion has an axial cross section having a rectangular shape having a height and a width.
- 37 36. (Previously Presented) The chisel of claim 36 wherein the head portion has a height and a width, and is dimensioned so that the height is at least 5 times the width.
- 38 37. (Currently Amended) A vertebral endplate chisel comprising:
- a) a base having upper, lower and intermediate portions, and proximal and distal portions,
  - b) no more than two shaving portions for contouring vertebral endplates, comprising:
    - i) an upper shaving portion extending distally from the upper portion, and
    - ii) a lower shaving portion extending distally from the lower portion,the upper and lower shaving portions being disposed substantially parallel to each other to define a separation distance, and

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c) a guide extending distally from the intermediate portion of the base and forming a head portion, wherein the head portion of the guide extends further distally than the shaving portions,

wherein the guide is a non-cutting centering device adapted to center the chisel within the disc space so that equal amounts of bone are removed from each endplate by the shaving portions as the chisel moves through the disc space.

39 38. (Previously Presented) The chisel of claim 38 wherein each shaving portion comprises a vertically extending portion extending toward the opposite shaving portion for a distance of up to 30% of the separation distance.

40 39. (Original) The chisel of claim 38 wherein each shaving portion has substantially no vertically extending portion.

41 40. (cancelled)

42 41. (Currently amended) A vertebral endplate chisel comprising:

a) a base having upper and lower portions, and proximal and distal portions,

b) an upper shaving portion extending distally from the upper portion,

c) a lower shaving portion extending distally from the lower portion,

the upper and lower shaving portions being disposed substantially parallel to each other, and

d) a single guide disposed between the shaving portions and extending distal to the shaving portions, and having a height and a width, wherein the height of the single guide at least 5 times greater than its width,

wherein the guide is a non-cutting centering device adapted to center the chisel within the disc space so that equal amounts of bone are removed from each endplate by the shaving portions as the chisel moves through the disc space.

43 42. (Currently Amended) A vertebral endplate chisel comprising:

a) a base having upper and lower portions extending distally therefrom,

b) an upper shaving portion extending distally from the upper portion,

c) a lower shaving portion extending distally from the lower portion,

the upper and lower shaving portions being disposed substantially parallel to each other, and

d) a single guide disposed between the shaving portions and extending distal to the shaving portions, and having a height and a width, wherein the width of the single guide no more than 50% of the width of the upper and lower shaving portion,  
wherein the guide is a non-cutting centering device adapted to center the chisel within the disc space so that equal amounts of bone are removed from each endplate by the shaving portions as the chisel moves through the disc space.

44 43. (cancelled).

45 44. (cancelled).

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